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TITLE: Reinforced conveyor belt comprising a multi-layer structure with at least one intermediate fabric layer containing spaced reinforcing steel rods in the weft of the fabric layer
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INVENTOR-INFORMATION:

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CLAIMS:

What is claimed is:
1. A device for conveying objects from one location to another, said device comprising:
a first layer;
a second layer comprising a woven fabric, said fabric having a plurality of weft threads;
a third layer, said first and said third layers adhered to said second layer; and
a plurality of reinforcing rods interwoven in said second layer parallel to said weft threads, wherein each rod of said plurality of rods is inserted in said second layer between successive bobbins of weft threads.

2. The device as recited in claim 1, wherein said second layer further comprises a top layer, a bottom layer, and at least one intermediate layer therebetween, said plurality of rods interwoven in said at least one intermediate layer therebetween.
3. The device as recited in claim 1, wherein said first layer and said third layer are made of a material selected from the group consisting essentially of plastic, rubber, synthetic rubber, polyvinylchloride, and polyurethane.
4. The device as recited in claim 1, wherein said second layer is made of a material selected from the group consisting essentially of three-ply-cotton, interwoven three-ply-cotton, polyester and nylon.
5. The device as recited in claim 1, wherein said first and said third layer are made of rubber and said second layer is made of interwoven three-ply-cotton.
6. The device as recited in claim 1, wherein said distance between said adjacent rods is greater than or equal to approximately 10 inches.
7. The device as recited in claim 1, wherein each rod of said plurality of rods is made of a material selected from the group consisting essentially of stainless steel and spring steel, each rod of said plurality of rods having a gauge of approximately 0.062.
8. The device as recited in claim 1, wherein said third layer has a bottom surface that is textured.

9. A carcass used to provide tensile strength and puncture resistance to conveyor belts, said carcass comprising:
a plurality of layers of fabric, said plurality of layers having a top and bottom layer and at least one intermediate layer therebetween, said top, bottom and at least one intermediate layers interwoven together, said at least one intermediate layers having weft threads; and
a plurality of reinforcing rods placed at least ten inches apart and parallel to said weft threads in one intermediate layer of said at least one intermediate layer.
10. The carcass as recited in claim 9, wherein each rod of said plurality of rods is interwoven in said at least one intermediate layer such that each rod of said plurality of rods occupy a weft thread site in said at least one intermediate layer.
11. The carcass as recited in claim 9, wherein each rod of said plurality of rods is inserted in said at least one intermediate layer between successive bobbins of weft threads.
12. The carcass as recited in claim 9, wherein said top layer, said bottom layer, and said at least one intermediate layer is made of a material selected from the group consisting essentially of three-ply cotton, interwoven-three-ply cotton, polyester and nylon.
13. The carcass as recited in claim 9, wherein each rod of said plurality of rods is made of a material selected from the group consisting essentially of stainless steel and spring steel, each rod of said plurality of rods having a gauge of at least approximately 0.062.
14. A device for conveying objects from one location to another, said device comprising:
a first layer;
a second layer including a plurality of layers of fabric, said plurality of layers of fabric having a top and a bottom layer and at least one intermediate layer therebetween, said top, bottom and at least one intermediate layers interwoven layers interwoven together;
metal rods interwoven into said second layer at least ten inches apart: and
a third layer, said first and said third layers adhered to said second layer.
15. The device as recited in claim 14, wherein said first layer and said third layer are made of a material selected from the group consisting essentially of plastic, rubber, synthetic rubber, polyvinylchloride, polyurethane.
16. The device as recited in claim 14, wherein said second layer is made of a material selected from the group consisting essentially of three-ply-cotton, interwoven three-ply-cotton, polyester and nylon.
17. The device as recited in claim 14, wherein said first and third layer is made of rubber and said second layer is made of three-ply-cotton.
18. The device as recited in claim 14, wherein said third layer has outer surface that is textured.

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